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EXAMINER

CHU, DAVID H

ART UNIT PAPER NUMBER

2672

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/814,433

Applicant(s)

HARMAN, ROBERT M.

Examiner

David H. Chu

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 12, 14 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference number 200C in paragraph [36]. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: The specification of the application is missing a summary of the invention.

3. There is a grammatical error near the end of line 6 on page 12 of the Detailed Description of the Preferred Embodiments. Conceivably, "the. The" should be corrected as "the."

Appropriate corrections are required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 & 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Note with respect to claim 8, the applicant cites that the intermediate code changes depending on any following character code that follows. The condition "any following character" is confusing. Conceivably, this forms no significant conditional basis, as any/every type of character would suffice the condition.

Note with respect to claim 16, the conversion of the Half-Character intermediate code to either an Uncomposed Virama character codes sequence or a Half-Character character code sequence is confusing. The applicant presents the same conditions for both cases of conversion: two different conversions result under the same conditions.

Appropriate corrections are required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 2, 4-11 and 15 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Laukkanen et al. Laukkanen discloses a method and apparatus for providing Hindi input to a device using a numeric keypad.

Note with respect to claim 1, the teachings of Laukkanen discloses an device (FIG 1) comprising:

a “reduced keypad” 160 as, best shown in FIG 1. The keypad consists of both character keys, which is used for entering character codes, and a context shift key, which is used for entering intermediate codes (col.5, line 49-53);

a MCU 120 (FIG 1) that is “coupled” to a type of memory 130 (FIG 1). The memory includes a “text buffer” 130D (col.5, line 58-60), best shown in FIG 1. The MCU also carry out the tasks of an “intermediate code processor” as it processes data/tasks in the memory (col. 4, line 65 – col.5, line 21). Wherein, memory includes a Hindi character editor function 130A FIG1 (col.5, line 49-56) holding the tasks of the “intermediate code processor” as recited by the applicant.

Note with respect to claim 2, the teachings of Laukkanen show the use of a context shift key that combines consonants into clusters, which is the equivalent of using a “ligature intermediate code” (col.2, line 30-34).

Note with respect to claim 4, the teachings of Laukkanen shows how the context shift key creates a half-form during the process of creating a consonant cluster, which reads on the what the applicant claims: the use of a "half-character intermediate code" (col.3, line 12-14).

Note with respect to claim 5, the teachings of Laukkanen describes the use of a "display engine" 130C, best shown in FIG 1 (col.5, line 55-57).

Note with respect to claim 6, Laukkanen includes the use of a "display screen" 140 in his invention, best shown in FIG 1.

Note with respect to claim 7, components of Laukkanen have been discussed above with respect to claims 1, 5 and 6. Further, Laukkanen teaches how the generation of an intermediate code depends on any preceding character code (col.2, line 53-56).

Note with respect to claim 8, it is best understood by the examiner in view of the 112 rejection above that the intermediate code will change regardless of the type of character code that follows it. Therefore, the claim reads on the conversion process of claim 7 of the applicant, wherein the claim only sets a condition on the preceding character code that precedes the intermediate code.

Note with respect to claim 9, the keypad used in the invention of Laukkanen does "input character codes" as discussed with respect to claim 1 above.

Note with respect to claim 10, the input method for character entry of Laukkanen reads on the method recited by the applicant. Laukkanen also teaches the use of a "display" and a "display engine" as described with respect to claims 5 and 6 above.

Note with respect to claim 11, components of Laukkanen have been discussed with respect to claims 2 and 10 above.

Note with respect to claim 15, the teachings of Laukkanen discussed with respect to claims 10 and 4 reads on what the applicant recites as entering a "half-character intermediate code."

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laukkanen et al. Laukkanen teaches the conventional use of a Virama (col.2, line 10-12 and col.2, line 30-35). Laukkanen et al. does not disclose an "Explicit Virama intermediate code" that is used separately from forming a ligature. However an Explicit Virama intermediate code is a subset of the conventional Virama used in keyboards/keypads. Therefore, at the time of invention, it would have been obvious to one of an ordinary skill of the art to further define the conventional use of a Virama, as taught by Laukkanen, as an intermediate Explicit Virama to clearly differentiate between an explicit Virama and the start of the ligature.

***Allowable Subject Matter***

7. Claims 12, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claim 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. Aoiki discloses a method and apparatus for text input in various languages that utilizes a "reduced keypad" 210, best shown in FIG 2.
10. Jurion discloses a method and system that checks the validity of a sequence of input characters according to the syntactical rules of a selected language.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Chu whose telephone number is (571) 272-8079. The examiner can normally be reached on M-F 8am-5pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DHC

  
10/28/05  
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